



Slide Title **Sub-Slab Sample Decision Matrix for the South Dayton Dump Site**

Factors: A completed exposure pathway has been demonstrated at 4 locations to date. SS and IA screening levels exceeded.
Sub-slab samples are a better decision tool than indoor air (more accurate, less chance to bias low due to poor sample technique)

Objective: Identify next steps (NFA, quarterly monitoring, or SSDS installation) for locations based on SS levels.

Analysis:

- 1) Lowest TCE SS hit that had a TCE IA concentration greater than the IA screening level (Completed Exposure Pathway). That was Bldg #11 (2031 Dryden Road). TCE SS was 688 ppb and the TCE IA was 5.2 ppb. The non-residential TCE screening levels are TCE SS = 20 ppb and TCE IA = 2 ppb. These are the 10-5 screening levels. This is the worst case scenario (based on 4 IA samples exceeding screening levels to date)
- 2) TCE IA level of 5.2 and divided it by 2 ppb (IA screening level) = 2.6 meaning IA was 2.6 times the screening level
- 3) TCE SS level of 688 ppb from Bldg #11 and divided it by 2.6 = 265 ppb. 265 ppb is the minimum TCE SS level that has caused a Completed Exposure Pathway at the Site to date.
- 4) Summary: Any location with TCE SS = ND for 2 sample rounds (winter/sumr) = NFA
Any location with TCE SS >ND, but <265 ppb = Quarterly sampling
Any location with TCE SS > 265 ppb = SSDS installation
Any location with methane > 0.5% = intrinsically safe SSDS installation

**VAPOR INTRUSION SAMPLING SUMMARY
SOUTH DAYTON DUMP SITE
MORaine, MONTGOMERY COUNTY, OHIO**

Number on Map	Address	Parcel/Building No.	Comments	Type	Methane Screening Level	TCE Screening Levels (10 ⁻⁵ levels)		Date Sampled By CRA			Next Step
						Sub-Slab (in ppb)	Indoor Air (in ppb)	Max Methane in Sub-Slab	Max TCE Sub-Slab (in ppb)	Max TCE Indoor Air (in ppb)	
1	2215 and 2219 East River Road	3207 Building 2	Globe Equipment	Non-Residential	0.5%	20	2	NA	37	0.15	1/4 sampling, SS <265 ppb TCE
2	1901 Dryden Road	5054 Building 1	Valley Asphalt: On slab; Vacant	Non-Residential	0.5%	20	2	NA	354	0.4	Install SSDS, SS >265 ppb TCE
3	1903 Dryden Road	5054 Building 2	Valley Asphalt: Storage Building on slab Valley Asphalt to install SSDS	Non-Residential	0.5%	20	2	6.6%	32	ND	Valley Asphalt to install SSDS
4	1901 Dryden Road	5054 Building 4	Valley Asphalt: Pre-fab split level with unfinished basement	Non-Residential	0.5%	20	2	NA	63	ND	1/4 sampling, SS <265 ppb TCE
5	1901 Dryden Road	5054 Building 5	Valley Asphalt: On slab	Non-Residential	0.5%	20	2	ND	354	0.05	Install SSDS, SS >265 ppb TCE
6	1951 Dryden Road	5171 Building 1	B&G Trucking - single story commercial-use building	Non-Residential	0.5%	20	2	ND	1,358	1.5	Install SSDS, SS >265 ppb TCE
7	1951 Dryden Road	5171 Building 2	B&G Trucking - slab-on-grade	Non-Residential	0.5%	20	2	ND	2,977	13	CRA to install SSDS
8	2015 and 2019 Dryden Road	5172 Building 1 Overstreet	Vacant	Non-Residential	0.5%	20	2	NA	5,396	5.6	CRA to install SSDS
		5172 Building 1 S&J		Non-Residential	0.5%	20	2	ND	5,582	3	CRA to install SSDS
9	2003 Dryden Road	5172 Building 2	Single story slab-on-grade	Non-Residential	0.5%	20	2	NA	26	0.08	1/4 sampling, SS <265 ppb TCE
10		5172 Building 3	Vacant	Non-Residential	0.5%	20	2	NA	744	0.99	Install SSDS, SS >265 ppb TCE

early in removal criteria

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MORaine, MONTGOMERY COUNTY, OHIO**

Number on Map	Address	Parcel/Building No.	Comments	Type	Methane Screening Level	TCE Screening Levels (10 ⁻⁵ levels)		Date Sampled By CRA			Next Step
						Sub-Slab (in ppb)	Indoor Air (in ppb)	January and March 2012			
								Max Methane in Sub-Slab	Max TCE Sub-Slab (in ppb)	Max TCE Indoor Air (in ppb)	
11	2031 Dryden Road	5173 Building 1	SIM Trainer: On-slab	Non-Residential	0.5%	20	2	0.97%	688	5.2	CRA to install SSDS
12	2045 Dryden Road	5174 Building 1	Command Roofing: On-slab	Non-Residential	0.5%	20	2	ND	164	0.06	1/4 sampling, SS <265 ppb TCE
13	2075 Dryden Road	5175 Building 1	Slab-on-grade: Former Alliance Equipment and Supply - Vacant	Non-Residential	0.5%	20	2	NA	26	ND	1/4 sampling, SS <265 ppb TCE
	DP&L North Building			Non-Residential	0.5%	20	2				Sample (EPA)
	DP&L South Building			Non-Residential	0.5%	20	2				Sample (EPA)
	2229 Dryden Road	5223 Building 1	Vinny's Bar & Grill - North	Non-Residential	0.5%	20	2			①	Sample (EPA+CRA) } agreed to allow sampling
			Vinny's Bar & Grill - South	Non-Residential	0.5%	20	2			②	
	2230 Dryden Road	2943	Village Park Community Mobile Home Office	Non-Residential	0.5%	20	2			③	Sample - EPA + CRA
	Trailer #16	2943		Residential	0.5%	4	0.4				Sample
	Trailer #17	2943		Residential	0.5%	4	0.4				Sample
	2232 East River Road			Residential	0.5%	4	0.4			④	Sample EPA + CRA
	2233 East River Road	3253 Building 1		Residential	0.5%	4	0.4	NA	NA	0.01 ⑤	Sample EPA + CRA
	2317 East River Road			Residential	0.5%	4	0.4				Sample
	2347 East River Road	3257 Building 1		Residential	0.5%	4	0.4				Sample
	2359 East River Road	3258 Building 1		Residential	0.5%	4	0.4				Sample
	2373 East River Road	3262 Building 1		Residential	0.5%	4	0.4				Sample
	2391 East River Road	3263 Building 1	Vacant???	Residential	0.5%	4	0.4				Sample

methane in explosive range

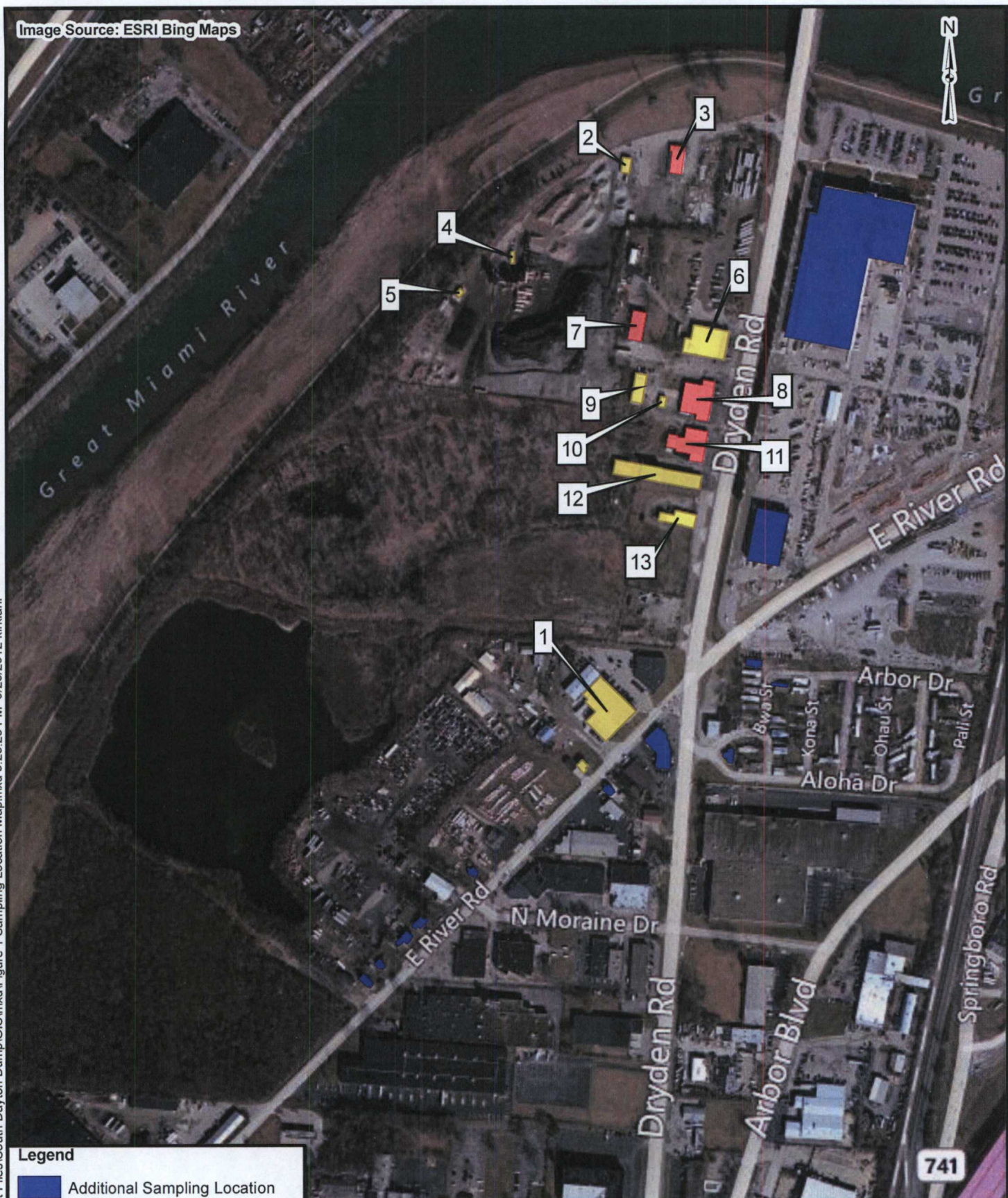
agreed to allow sampling

Notes:

Results that are bolded and highlighted yellow are greater than the screening levels.

- NA = Not Analyzed
- ND = Not Detected
- ppb = Parts per billion
- TCE = Trichloroethylene

Image Source: ESRI Bing Maps



Legend

- Additional Sampling Location
- Previously Sampled by PRP
- Previously Sampled by PRP; SSDS to be Installed

0 600
Feet



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Figure 1
Sampling Location Map
South Dayton Dump Site Site
Moraine, Montgomery County, Ohio